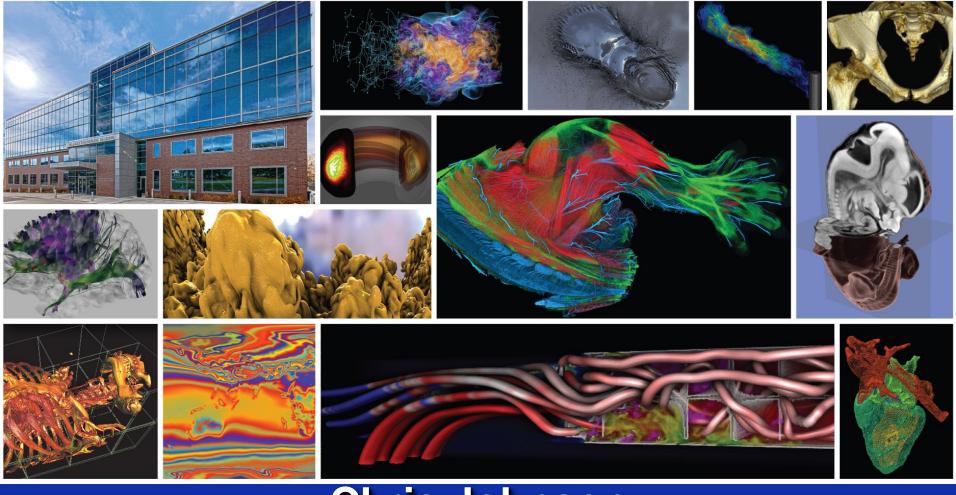
### **NSF-NITRD Visualization Workshop**



Chris Johnson
Scientific Computing and Imaging Institute
University of Utah

## **SCI Institute Faculty**























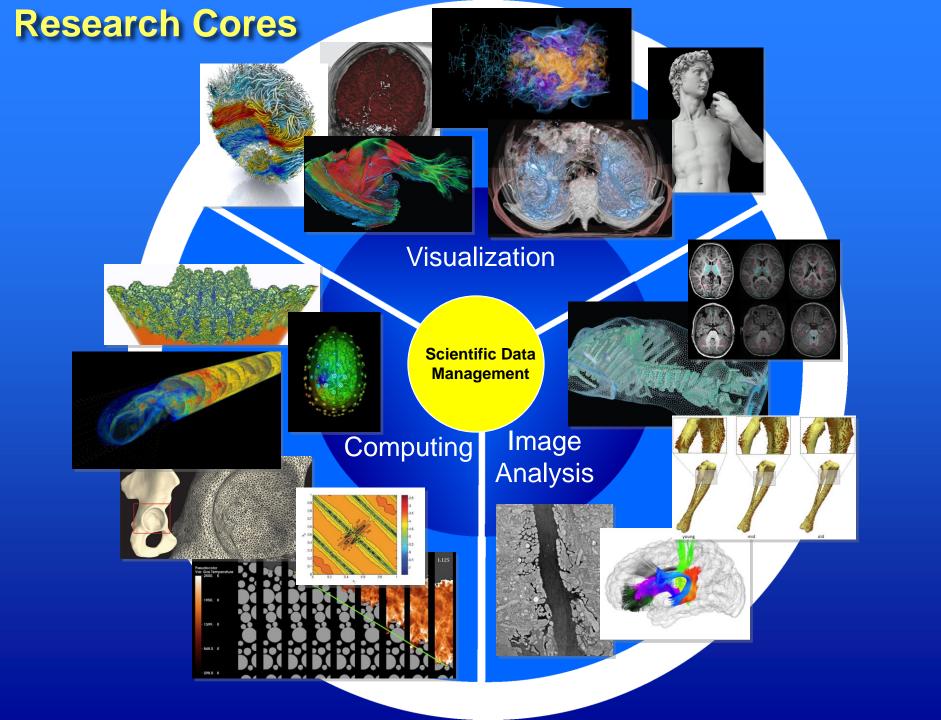












#### Centers We Direct



NIH/NIGMS Center for Integrative Biomedical Computing

















UTAH Center for Computational Earth Sciences







**Center for Extreme Data Management, Analysis, and Visualization** 

















#### National Centers We are Affiliated With



**Scalable Data Management, Analysis and Visualization** 

















IAMCS
Institute for Applied Mathematics and Computational Science

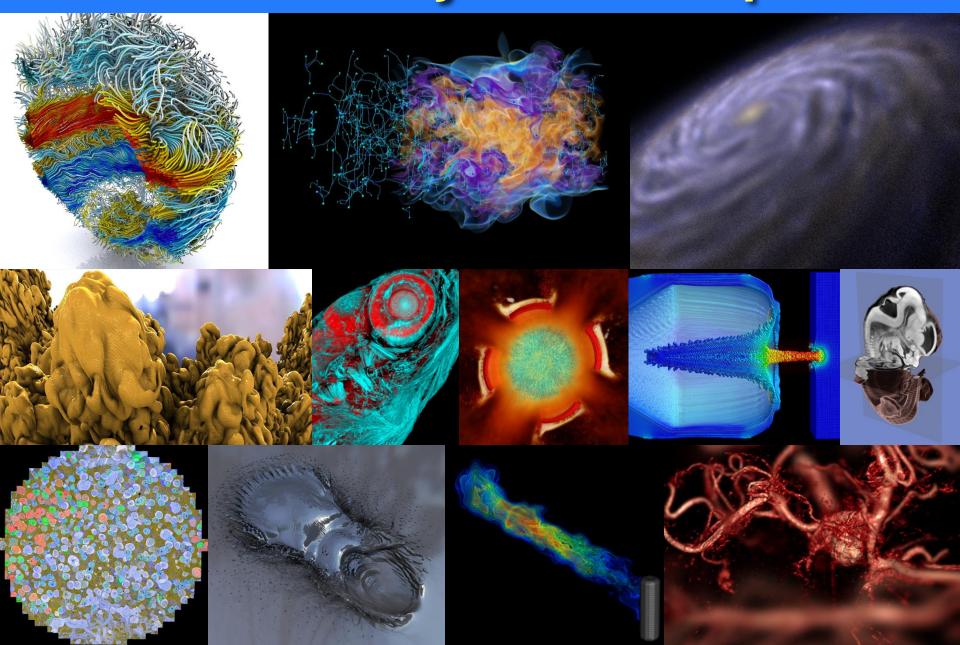
CDC Decision-Support for Infectious Disease Epidemiology

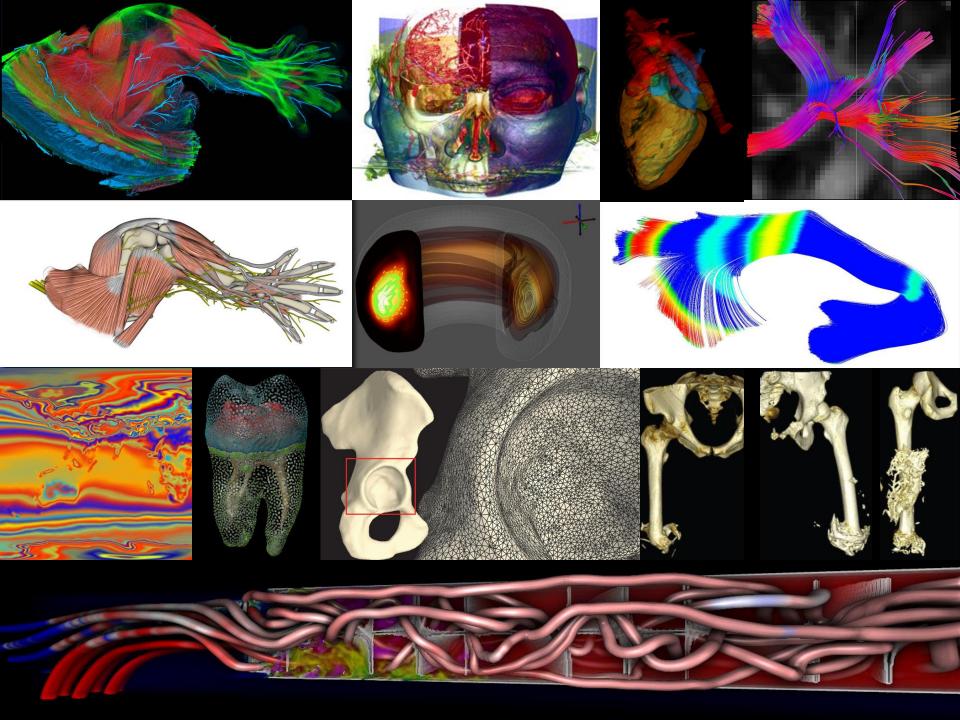


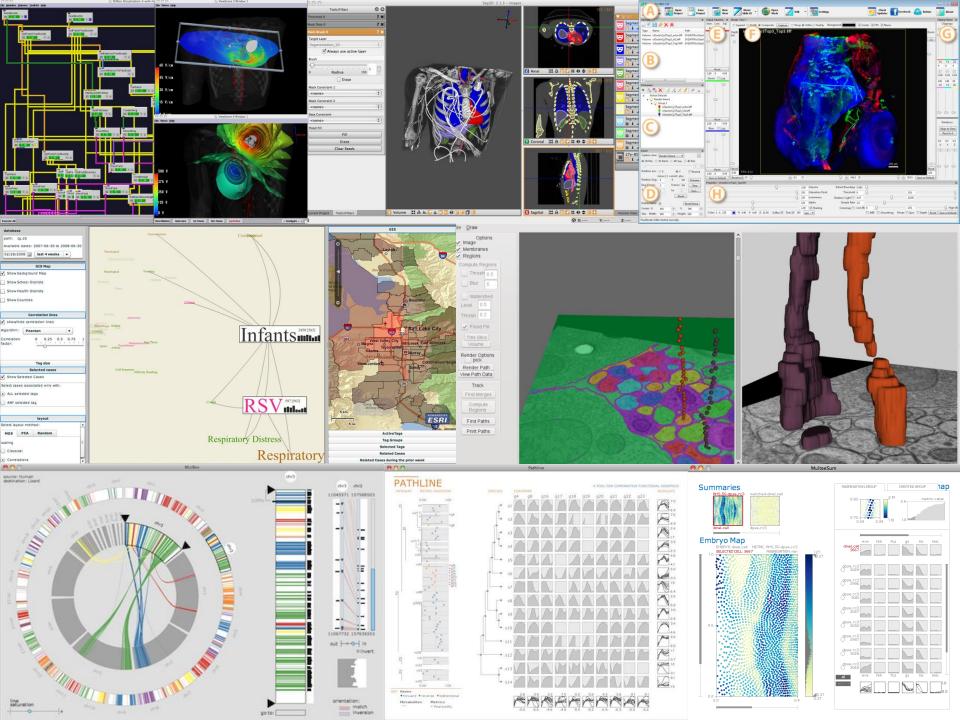
**Center for Exascale Simulation of Combustion in Turbulence** 



### **New Visual Analysis Techniques**

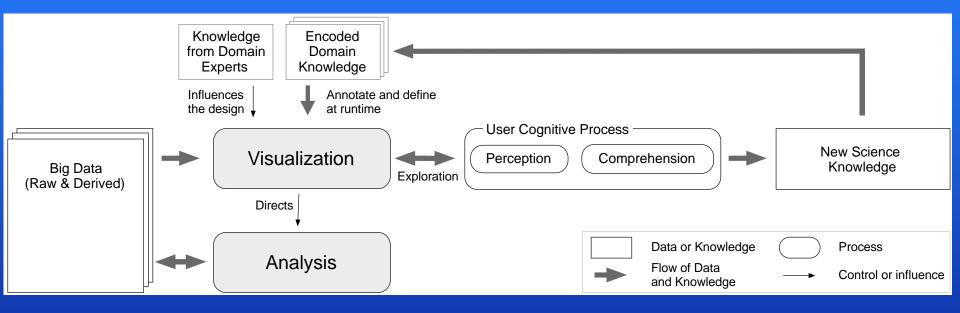






### **Current Challenges**





### My Wish List



What is the Problem to be Solved by Whom and for What Purpose?

Use Techniques from ALL AREAs that are Appropriate for the Task(s)

**Prototype, Test, and Quantify Effectiveness** 

What are the Best Abstractions – Borrowed or New or Both?

**HCI and Interface Design Targeted to Solve the Problem** 

Start Representing Error and Uncertainty – It Does Not Go Away Just Because You Ignore It

**Perceptual and Comprehension Issues** 

Scalable Visualization – Stop Creating Techniques that Only Work at Small Scale

### **More Information**



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